Appendix K

Well Bore
And
Completion
Diagrams
For
Monitoring Wells

			Market and the second s	manuscrapholymens and a	ANN PARTICIPATION OF THE PROPERTY OF THE PROPE	THE COLUMN TWO IS NOT THE OWNER,				CANADA PARA PARA PARA PARA PARA PARA PARA P			***************************************
and the second of the second o	<u>@</u> м	ORRIS	JN KN	UOSE	N CORP	ORATIO	ON				Sheet	CONTRACTOR OF STREET,	3
	EN	MADRIV	INTAL	SERVI	ess GROUI BOF		LE LOG				Project 44	23-022	20
											Hale	BHO6	
Í	Protect A	MS	Nb.	. チ	ESI		,	Locations	MS N	27.	Vernor	1 Texas	
	Name and Associated Supplementaries of the Associated Supplementaries of t	NAME OF TAXABLE PARTY OF TAXABLE PARTY.	CONTRACTOR DESIGNATION AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF	terbusers of the second second	17195.	24.24	7	Coring Cap			llina		
	Onl Make		/Duny	7-81		•	Dec	76.7		note Casing &	Size 0	How Size: #	•
	Envaport.	and the second	645.0	Character and Constitution of the Constitution		Angue Iro	m Vers and Bea	COCCUPATE CONTRACTOR C		Depth Bott	om al House 79.0'		
	Water Leve	- 716	PROPERTY AND ADDRESS OF THE PROPERTY OF THE PR	Fuid &	Accinves		VA Dam Stare 7/19	100	. Cata Fini	CHICANA CHICAGA CANA CHICAGA C	en e	Fiz Ham	
	/8.3(in4	ore) (in	opu h Sampli	dW M E	W/100% b	ľ		100	PARTICULAR PROPERTY OF THE PARTICULAR PROPERTY O	ESCRIPTI	ON IV		TROND
ā	- E	43	E	ER	TEST RESULTS	BOLIC						•	
E EVETOR	DEPTH BELOW SURFACE	HTERVAL (71 MC)	TYPE A NUMBER	* IECOVERY	6-4-4-	SYMBO	Name, color, weathering, n	disnu ase' a	nciusions, an	quiarity, moi	isture conte	nL	
		Vo-05	CHANGE STREET,	† & !	Manufactura and an analysis of the supplemental analysis of the supplemental and an analysis of the supplemental and an analysis of the supplemental an		SAND MI.	ih sowe	F SILT (M), mo	Lerateb	rown (5.4R	414),
	'	1200	4 22	- ^		1.7	v.fineq proba	rained jau	autoze, 15 ducto cl	% SIIT, d some act	ry (upp nutus)	u several f	+
•			PZD=C Chemic	5.0			PID=4.						
<u>~</u> .		-	Y Y			1.7	_	•		 /4)			-
,	5	1405	TOF .	3			grades lo	م به دایه ای	mydcibl	Kijey		•	• •
• "	•	<u>_</u>	them 10		<u> </u>	1.1				•			_
.]		5.0		1.7	PID=4	b			٠		
<i>/• •</i>		ļ <u>;</u>	3										
	10-	TO BILL	0 1 B		October 1988	1/1	- lamina	led mod	erale red	hopy prom	m (10P44	s) and vero	,Pers
		- 1				1.7	John J. (10	y R 0/2)	٠			•	
]		5.0 5.0		***	PID-4	ه.		e ⁿ ,			_
		-		5.0	; ; [gradah	ona)	obtosvadnosti eta esta esta esta esta esta esta esta	essemmana por enconsension monte and a second	Ann en versigient om en en reventioù hab en pentre colleman en con en en papa par par	
	15-	_ 	0 - C				SAUP(SP)	, moder hoge, he	iah reddi Silt	sh brown	(10R 3/4)	yn twiat	uned,
•		- 2 K	-18(04/0C Chemical Pro=6.0				,						
; / _]3	734	5.0			PID-Ø	•		- 11:5°4		- WAY VEAR	
183 -)			5.0		1, F.	Jery silty s	Pangapas.	1, 30% s	ilt, same	rated	z 4/6), vay	,
श ना है।	20-	4		Security Sec		7.1	245 013	الدعوا مله	uSan'GH	HIMALI	own (5 y	es/b), 15-20	% silt
		+				4.3	PID=0		8				-
		1		3.0 5.0			SANDVCL	AV (CL), S	ale y 116	ush bec	un (wyr	6/2), 20% W	-
] -		5.0			grave	red sand,	low plas	الادابط أ كه	husted		-
	25-	_											



2 3
Project Number: 4423-0220
Hole Number B H O6

1		TO A STATE OF THE PARTY OF THE	Marie Constitution Constitution of the Constit	**************************************	The Contract of the Contract o	mijorene o territoria de la composição de		nerovatekezeten)
P	A	ms A	b.7	ESI	-)	MS No.7 Vernon, Texas	
- bossess			SAMPL	E	STANCARD		SOIL DESCRIPTION	***************************************
ELEVATION	DEPTH BELOW BURFACE PI	MTERWL	TYPE A NUMBER	RECOVERY	(M)	SYMBOLIC	Name, color, grain size, sorting (or gradation), plasticity, weathering, mineralogy, inclusions, angularity, moissure content.	
- agranin		***************************************		1		- Cherry State Constitution of the Constitutio	CL (atabove)	
		4		}			grado turnal	┥
		4	[,	510			TIBLE SANDIO LIGHT BROWN (SVR SID) . V. LIM Gravied.	
		_		5.0			CLAYEY SAMP (SQ, light brown (SYR 5/0), v. functionied,	4
							PIO=0.0	4
		7		ľ				
	30-	1 .					SANDY CLAY (22), very pok orange (104), 25-30% v. fine	
	} -	-			·	CATALOGUE AND	grained said, Shoff, abundant caliche Modulas (2-3 mmdas	LC.w
	Ì	4		4.8		and more and a		4
				4.8	•		PIO=4.4	
٠		_]				- September 1990	C15.1	. 4
		7	'			The state of the s	Silty Saip (SM), mottled light brown 12 56) and ery pale orange (10 y 8 8/2), v. fine grained, qualitye, 10-20% silt, soft]
	35-	1 ·	1	- International Control	•	1/	orangeloye 8/2), v. fine grained, quelinge, 10-20% sitt, soft.	(
	ł	-				1.7.3	flowing sand	1
		4		1.0		11		٦
		4		4.0	٠	17.		-
·.,			1	3.0	ļ	1	PID=4.6	
. ,						11,		
	40 -					3.		
		7 📏	1		·	*****	SAND (SR), ' ight brown (SYR 5/6), v. fine grained, sub brunded to Syb is right a soft, flowing same	•
		4 .		21			Subangular, Soft, Rowing same	7
		4	1	5.0			.1	7
		1					410-4.6	-
	45-		1.					
	45 -	·]				•	_
		-	1			ar la		
		4	1	1.0			PED=4.6	
		4		3.0				
-	- }.	4				1:5		-
	5-							. ACTION CONTRACTOR
	50-	7					- grades to rounded grains	_
	1	7					1	
		-		1.3				
		4 _	1	1.3			PID=46	•
		1						-
	55_		1					
				1		, -		· ACCOUNTABLES

MORRISON KNUDSEN ENVIRONMENTAL SERVICE	
ENVIHONMENTAL SETTING	

Sheet 3 of 3
Project Number: 4423-0220
Hole Number R Hole

- Tolecz	**************************************		No	.7 E	EST STANGARD PENETALITON		AMS NO. 7 Vernon, Texas SOIL DESCRIPTION
DEPTH	URFACE #1	HITERVAL (7) ME)	TYPE & NUMBER	#. RECOVERY	1851 MEDULIS 8"-4"-4" (M)	SYMBOLIC	Name, color, grain size, sorting (or gradation), plasticity, weathering, mineralogy, inclusions, angularity, moissure content,
· ·	Para Singuis (Consederate	personalization		17/5.0			SAND (SP) as about PID= \$\phi.\$\$
60				1.6			PID=φ.φ
63	-			7.0			PID= \$\dot\dot\dot\dot\dot\dot\dot\dot\dot\dot
70	•	5,0	5.5.7	74/50			SAND(SP) as above PID = 4.6
7:	5 — - - -	15.57 (2001)	AMS7-8HOG	32 32	Suh		Topof Redrock at 76.7' SA DSTONE, maj rak reddish brown (wayle), very fine grained, traces faint lowy rolex-bodding, highly weathered. T. D. at 79.0'
8	- contraction						

MORRISON KNUE: EN CORT ORATION ENVIRONMENTAL SEFTICES GROUP
BOREHOLE LOG

******		PROPERTY
	Sheet at	******
	Project Number: 4423-0220	undany
	Hole Nutrick H-07	

						501						HOM N	BH-07
	ا بکرمود	= A +	1/ d	10.7	' <i>1</i> =5		Marketin and State Contraction of the Contraction o		Locations A	MS	No. 7/	Ver	non TEXAS
	Caore	AND THE PERSON NAMED IN COLUMN	Waterina				- 7h		Onling Carrosc	COT. 7	rilling		
	1311	754	337/	Continue Mar	garage C	171980		Des	no Top of Rock)Ces	nn Casing & Sta	E	Hose Size:
* **		0119	yea		ンムニ	81	Angue from	n Vert and Bea			A Barren	7.0	
	E.va	- J	367.	0 (1			L 1/4	NA Date Spare		Data Figs	Æ,		Highammons
	Water 10%	n (arc)	11.3 (in 1701	2	Lywil	Home A.	y mer	7/17/			B/00 (ESCRIPTION	11	HIP (FIZ WWW)
		=	S	PLE		PERTAINS							•
	NO.	, CE	RVAL MC)	- E	ECOVERY	6-4-4	SYMBOLIC	Name, color,	grain size, sort mineralogy, incl	ting for gra	dation), plastici gulas /, moistu	ly, re cont	ent.
	ELEVATION	BELOW	() me	TYPE L NUMBER	PEC((2)	84E		•	ane			
	diameter (company)		6	8 _			·o.f.	51. 1D(5	diam ato	ainise i	5 را ان ارن	%9r	bvol, trace colliche
			7,9	2.00	3.3 5.0		1-0-	in.	dules, Art	sticuli	Fill, 50++		
. garage			3	BHOT-S- HEMICAL IDEG	5.0		ai	7ID. = 4.	, ' .				•
-		_		でか			9						
		5	5-6	₹ -05	NAMES OF THE PERSON NAMES OF T			vas abov	e)				•
. •		-		MY	1.9		7.7						
		-	١	CAROSA	50		. A.		.		,		•
	,. ,							approxi				u). m	edium to coaise —
	Z) ~	[10-11 ¹]	-180	6			r at	21 116 4 'S' D'	10umse	a product	. 7.5	371
		•	(1525)	Ges.				501	humbed of	10:0' \'	mothled the	biak	reduch brown -
		-	† ·		2.0			(10)	R46) ard	light bi	own(5yr:	%),\ .5%	ery func arouned, Sitisoft
		•	1		3.0		1:1		are likerous	• • •	• • • • •		•
		سے عر]				-17-	PÍD=	\$6		•	•	
		15 —					1			•			
			-		3.5								
			_		50)	1-01	ay ron	~~\&				· · · · · · · · · · · · · · · · · · ·
بسر	-		-					CL VEY	SAND (S	c), lan	urated ligi	ht p	rown (5yr 5/6) _
		20-	-				-	A	nodera	le yelk	35% Cines	un (X ., tra	rown (54R 5/6) oyr 5/4), fire ce caliche nodules
	•		7		6		1. ::	1 4	ianneas god iHH		- W 11.00		
]		50		.	PED=4	. p				
			-										
		i		1	1	1	· _ ·	-1					



BOREHOLE LOG

Sheet Z at 4 Project Number: 4423-0220 Hole Number BH-07

- 1							
P	Lolecz Y W	ر ا	Jo. 7	ES	I		AMS No. 7, Vernon Texas
L			SAMPLE		DRADMATE		SOIL DESCRIPTION
ELEVATION	DEPTII BELOW SURFACE PI	MTERWAL	TYPE 4 NUMBER	RECOVERY	POINTRATION TEST RESULTS 8"-6"-6" (N)	SYMBOLIC	Name, color, grain size, soning (or gradation), plasticity, weathering, mineralogy, inclusions, angularity, moisture content,
		AND THE PROPERTY OF THE PROPER	energia para de esta por esta para de esta pa	5.0			(as above) PID=4.4
	30 -			F.A	дымандатериндерининдерин на		trace gravel (up to 111 dia neter), some caliche nodules and - layers
	35—			5.0			SAND with some are us (SW), moderate yellowish brown
/., ,	-			3.8		, a	CLYEY (AND (SC), laminated take of the hot of black and modulate of the office of the lamb modulate of the office of the lamb modulate of the lamb modulate of the lamb modulate of the lamb make the lamb makes the lam
·	40 -			4.0			PID=0.0
	45-		-	3.8			S.ND(SP) In ht brown (5yR 44), fine growned, poorly grow of, trace sitt, quartoze, flowing sands PID=46
٠	50-			40,50			(sabour) Core barrel shick in angers due to flowing sand on 50-55' run. Could not disladge. Had to pull angers and rods out of hote to disladge and go back in.
	55		ŀ	**************************************			

MORF	RISON KNUDSEN DNMENTAL (ERVICE	CORPORATION
SNVIRG	DIVERS LATINGMINE	5 GROUP
	•	

Sheet 3 of 4
Project Number:
4423-0220
Hale Number
124 ----

								BH-07
\ ₁ F	Project	l NY 4	- o. t	h :	7 ES	Σ		Ams No. 7, Vernon, Texas
	ŀ	flx:	>]][[<	JU. MPLE		3 1200-00-00		SOIL DESCRIPTION
EL EVATION	PTII LOW		HTERVAL	TYPE A NUMBER	RECOVERY	POSTRATION TEST MESULTS PS-4"-4" (N)	SYMBOLIC	Name, color, grain size, sorting (or gradation), plasticity, weathering, mineralogy, inclusions, angularity, moisture content.
ū			a	S E			N 2 7	Drilled ahead without sampling from 55-65'
· ************************************	•	-	ļ	•	$\setminus /$		\setminus	AT 65' added Insta-Vis highed Polymer to mud pit to bring up cultury and flush out HSA. (A CETCO product) -
	60.							
		-	-		$\left \right $	•	$\left \right/ \right\rangle$	From 65-86, switched from continuous sampling-
▶.	65				Statement and assume the second		soft varancesign have been week	from 65-86, swithed town to the things savieting to drive sampling with down to be hammer - and 2'spoons (2"diameter) SAUD (SP) as a bove, flowing saviet
• .	65				2.0		-	STADE CSF / US & DOGG / NOTING SAME
τ. - /	,	1			0.7			Pro=0.0
. ·•	170)— 	`,\		2.0	de la filmanda de la companya de la		
		-	٠		2.0	neon National Republic Parks of the Control of the	-	PID=db
•	7.5	5-	3		20/2.0	***	- :::: /·/:	SANDY SILT (ML), light brown (SYR 5/6), sand is v. fine quined (30%), trace clay.
,			•	3	- CONTRACTOR CONTRACTO	more processors of the contract of the contrac	- <u>/ / / .</u>	: SAID(SP) as above
		-		hemice	1.0	and the Control of the State of		FID=0.0 1 Hout sampling from 79 - 84
٠.	8	0	•	07-5-85 (chamical)			X	
		- - -	47,10	AMS7-BHOT			3	SAND(SP) as alrow

CONTROL OF THE PARTY OF THE PAR	
(1)	MORRISON KNUDSEN CORPORATION ENVIRONMENTAL SERVICES GROUP
	ENVIRONMENTAL SERVICES GROUP

_	
	sheet 4 at 4
	Project Number: 4'423-0221
	Hole Nation

				ant de rain ann ann ann ann an			OH-07
ا ا	CIPCE A!	NS	No.	7	est		AMS No. 7 Vernon, Texas
ELEVATION	DEPTII BELOW SURFACE MI	MTERML	TYPE L NUMBER	RECOVERY	STANDARD PENETTATION TEST RESULTS	SYMBOLIC	Name, color, grain size, sorting (or gradation), plasticity, weathering, mineralogy, inclusions, angularity, moissure content.
· egyimittee		ONLY OF THE PARTY		3/4		J.::.::	SAND (SP) & 6 0 0000 TOP OF BEDROCK &T BS.5' SANDSTONE, moderate reducts brown (wor 46), silty, hand
						ونزيز	SANDSTONE, modulate reddich brown (10 R. 46), silty, hand
	Service and the service of the servi	lonangersteren (Masses	Terrest State of the Party of t	\$1000 Market 1000 Market 1		The second secon	T.D.@ 87.0'
	-						
	_						
	90-						- masteria
							· ·
			١.				
						i	
	95-						
						L	
•	-					1	
•	-		٠.				
	-	W					
	-		ļ				. *
	-						
	-						
	_						_
	-	- .					
	-					į	•
	_	<u> </u>	ĺ			·	
-	} _						
							-
						'	
		-					
	-						<u> </u>

	•												
	€ MC	RRIS	ON K	שפסטא	EN CORP	ORATI	ON	and the second s		•	Shee	Tables of the Control	.
	S EN	MADRIN	IENTA	L SERVI	CES GROU	۴	LE LOG				4	-c Number: 423-0:	220
					DO:	11110					Have	BH-08	3
٠ _٢ م ا	oee L	LMC	Λ/	o. F	EST	gyyva signey (deservit distribute y de Allinii		Locations	MS NO). 7 ,		n Texa	
G	Spirite and the spirite and th	The second secon	PROSTANTA POR PROPERTY OF THE PROPERTY OF T	(histing)	719815	. 19	openskil kindus kinduskil kinduskil Francoskil (kinduskil kinduskil kinduskil kinduskil kinduskil kinduskil ki	Drilling Cyne		Dulli			
	at Mare a	na Maas	1 /Drame	Adica Topolic	' HSA		De	80.5		on Casing N A	& Size: -	Hose Size:	
E	Long			.5 (m		Angue Iro	om Verz and Se N /4			Depth Boo	25.0	E. j	
W	Ster Law:	: 15 0	lin	Fluid &) pentoni	Llinna		olon	. Date Finis	0/00	чинительного поставлений поставлений поставлений поставлений поставлений поставлений поставлений поставлений п	Hir Ham	mons .
1/2	1.5 in Ci	ve or	SAMPI		STANGANG PENETRATION				CONTRACTOR	DESCRIPT	TON		
X 01		WAL.		VERV	FLANCON	SYMBOLIC	Name, color	, grain size, so	rding (or gra	dation), pl	asticity,	•	
ELEVATION	BELOW BUNFACE	HITERVAL (TIME	TYPE L NUMBER	710' RECOVERY	6-4-4-	SYME		mineralogy, inc					
decreases	Parameter Street, Stre	انمر	8		And the state of t		SAND (SI	e), light br	own (54	5/6),	v. fine g	rouned, to	ci sitt
	· -	1/8/00 (1200)	- SHOB	3.0				,					
	-	1860	Chem	3.0			400	roximal					. •
	_	• •	Y Z			1	LTY SAN	ordina H D,(SM), mo silt, take g che notul	d.Rdsl	obrown(. ounled	1012 4/6), 4/11210	v.finegr metu).ab	amed undant-
	5	\$0-60 \$0-60 \$0200	c.05	`		1.7.	coli	che rolul	10 (2-4	"diam.)	•		
	-	1 2		50		1.1	Som	5-15 5	liquit o	il odor	• ·		•
	-		ca.	50		1.1							
· .	10 —	(1300)	0/-1 E E	8	-	γ. V.							_
•	-	36	•	٠ م		11	mostly	some ve	ery pale on	ange (10/RB			
	-			5.0		1:1:	i inot			€.			
		٠,	9	, <u>51-3</u>		17.7.	- frace col	whe holul	10 (2-4 m	m)			•
	15-	1325	- E			114	اسمالمسا	end increase	ر روو م	6	• .		_
	-	25.	134	5.0		17%	- SUT COR				٠.		
	-	19	2	5.0		11.7	Specialistic Management and Special Control of Special		nerson-kerningkon de de kerningkon de kerningkon de kerningkon de kerningkon de kerningkon de kerningkon de ke				
-	19.5	38	1 50 3	4			ANDY CL	Ay (CL), lig e caliche T	int brown	low pla	ourity.	graines sa	Md (3>70),
	20-	1		· · · Description of the contract of the contr		The construction of the co			•	•	•		
	-	1		20				•			•		
	-	1	Prosed. d	35		diametrization diametrization diametrization manufacturing							•
•		-	وَمُ		-	an annagaean an a							
	25_	1		Caracana manana man									

BOREHOLE LOG

Sheet 2 at 3
Project Number:
4423-0220
Hole Number
BH-08

	AND DESCRIPTION OF THE PARTY OF	CHARLES AND AND AND AND AND AND AND AND AND AND			enterior de constitue de la co	· · · · · · · · · · · · · · · · · · ·	
Project	4ms	No.	.7	ESI		AMS. No. 7, Varnon TX.	
i		عاطسدى		STANDARD		SOIL OF SCRIPTION	
DEPTH BELOW SURFACE PI	HTERWL	TVPE 1 NUMBER	* RECOVERY	1651 263423 67-67-67 (M)	SYMBOLIC	Name, color, grain size, sorting (or gradution), plasticity, weathering, mineralogy, inclusions, angularity, moisture content.	
1 680					COLUMN TO THE REAL PROPERTY.	SANDY CLAY (LL) as a bore	
		PÌP 4.6	5.0		Microsophical Company of the Company	35-27'- grayish orange (1049 7/4) with abundant caliche noticle (3-7 dam). - gradus to light brown (548 5/6) without caliche	
30-			Sayunda an	monte conception of the second se		-30.0-322 grayish orange (1042 7/4), abundant coliche nodular	
		4.6 4.6	5.0			- grates to l. brown (5yr 5/6)	
-	·					gradational	
35		ero bu	3000	nerretiniqui propieta quan al richi con referencia del con referencia	///	BILTY: AUD (SM), light brown (Syx 5 k), v. fine quantoge. Well rounded, 20% sell, free clay, soft, flowing same	
40-	† †		гуунаттаганаган төмөө төмөөргүү	NANOLANIELO DE ESTADO NO PORTO P	/ /. / }.		
-	```	PED 44	PLD 1.5	13/5.0	·	1.1.	•
45-	-		Construence and an electric period properties of	тика принце принце пред дого принце п	i L	•	
-		q.e	1.0/5.0		/// ! ;	SANDYSILT (ML), mod. orange pink(syre)4), 158 v. fore seed, hand SAND WITH SOME SILT (SM), I. brown (syrs/b), v. fore grained, questional rounds; 10% silt, flowing soud, soft	
50-		(ID		от пастрация в поставления в п	1,		
-	6		4.L 5.0				
55_	1		general and a second				

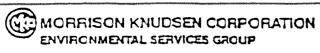
Mackey are and a second	
	MORRISON KNUD JEN CORPORATION ENVIRONMENTAL SET VICES GROUP
9	ENVIRONMENTAL SET /ICES GROUP
	DOCTION F

Sheet 3 at 3
Project Number:
4423-0220
Hole Number
BH-08

i I ^P	rojece.				ESI		LOCATION AMS No. 7, Vernon TX SOIL DESCRIPTION
ELEVATION	DEPTN BELOW SUBFACE #1		TYPE L NUMBER	RECOVERY	STANDARD PENETRATION TEST PERSETS 6"-6"-6" (N)	SYMBOLIC	Name, color, grain size, soning (or gradation), plasticity, weathering, mineralogy, inclusions, angularity, moisture content.
· · ·				10/50	uman den den den den den den den den den de	/ . / j.	SAND WITH SOME SILT (SM) as a bove
	60-		91D 4.6	0.4			
4.		65-	P1D 0.6	2.2 5.0		////	VERY SANDY SILT, 1. brown (5 yr 6/4), v. smegres and siff SAND (SP), light brown (5 yr 6/4), v. smegrared qualitye, rounds - flowing sand.
	70-	PID Ø-6	1.N 15.0			•	
	75-	1-80.5') 73.0	S-80(EB) Chimical PIO-6.4	1.0			To 0 of Bedrock at 80.5
:	80-	1-1-08)	D G	2.8	• • •		Top of Bedrock at 80.5 SANDSTONE, Mod. reddish brown, vi fine itemed; found loworgh x-bedding, highly wathered T.D. at 85 bgs

MORRISON KNUDSEN ENVIRONMENTAL SERVICES	CORPORATION GROUP
2,,,,,,,	BOREHOLE LOG

							BH-09
ا س	7•= A	MS	NO.	7 E	SI		AMS No.7, Veron Taxas
Co	*******************************	Photograph of the contract of	Management of the Control of the Con		E) 1719	aıЦ.	Onling Converts /
		433 a Moose	66.6 10mmg h		Longye	an BK	Rotary Decor Top or Rose Deom Casing & Size: Hole Size: D-95' [12]/ Rotary Por Security (Strain) 95'-216' (8'/4') am Vert, and Searing.
34	rdner-D	enverli	500/ Mu	d Rohi	-y Rotari	1/MW Ango tro	Mothery 100.5 91' 8 % "(STEEL 1) 15 - 210 (477)
E	M STOREN	-136	2.82	ME TAK	Bembaile	Bokho	le Ka med w/ DB/teck D40K1 210
W	Ter Level:	ď	でら	0-4,5	Butoni	Mud	1/12/00 8/03/00 PHIL HAMMONS
L.,),,	LANG		STANGANG PRETRUTION		SCIL DESCRIPTION
3		ΝΓ	. 5.	/ERY	RESULTS	016	Name, color, grain size, sorting (or gradation), plasticity,
ELEVATION	DEPTH BELOW BURFA	HTERVAL	YUMBER NUMBER	RECOVERY	6"-5"-5" (N)	SYMBOLIC LOG	weathering, mineralogy, inclusions, angularity, moisture content.
됩	223	#	→ Z.		Service representation of the service of the servic	1	Drilled from 0.0' to 88' bgs with 4.25" tricone; logged cuttings (see log of adjacent Borehole 131+08 for lithologies)
	_			\			lithologies)
	· -					N 1	
						1 1	
						\mathbb{N}	
	10 _					ΠI	
	_					ΠI	
	-			$ \setminus $			
,. ,	-					M	<u> </u>
•	20-	<u> </u> 		1.1		$\mathbb{I} \mathbb{V}$	I approximate depth to groundwater
	-	,		V		1 1	
	-	\\ \forall \\ \gamma \\ \g	₹ 2		₹2		*
	-	2	. 2	1 /		11.	
	•	1				1 /	-
	30]_	1	1/1		1/1	
]				111	
	.	_		111		1/ \	
	┽	1				$\parallel \parallel \parallel$	
	40-	4		$\parallel \parallel$		$\parallel \parallel \parallel$	
		4					
	-	4					
	.	-			l		· · · · · ·
] .	4	1		ł	V	1



1						·	BH-09
	Project A 1	MS 1	16.7	ES	CONTRACTOR OF THE PROPERTY OF		AMS No. 7, Vernon Texas
		<u> </u>	SAMPL	E	STANDARD PENETRATION	1	SOIL DESCRIPTION
. 2		l .	1	≥	7257 253,023	0	The state of the s
EUATION	C E	HTERVAL	LE0	RECOVERY	Tonne more description of the second	SYMBOLIC	Name, color, grain size, sorting (or gradation), plasticity, weathering, mineralogy, inclusions, angularity, moisture content.
7	FOR	5	12	*8	6-4-4-	20	wassing, minimizely, seconder adminy, minimize committee
ū	30.00	=	下系	1 2	"	₩ 2	·
*60045		1					seelog of adjacent Boreholo BAOS for lithologies
	-	1	l .	N I		A /	
	-	ļ	l '	\		N /	
	ļ	! •		II /		N /	
	-	1				H H	
	-			11 /		Π / Π	
	60-			$\Pi \Pi$	· .	$H \cap H$	
		}		\mathbb{N}		$[\] \ [\]$	
		i					
	-	ł	}	1 1 /		M	•
] _	1		1 · 1/		$1 M_{\odot}$	
				1 V		1 V I	
	-	İ	·	1	1 .	i I i	
	70	{		l A		IA	
	_	ļ		/\		$\mid \mid $	
		1				1/1	·
	_	1				1/1/1	
	-	_		$H \Lambda$		[I]	
10	_	ĬĔ.				$H \cap M$	
٠.,	80	7				17 N	m 68 mileston d'hacal an ciul d'account and me
	الموا	2				11 N	Top of Bedrock at 80.5 (based on contact encountered in - adjaunt BHOB)
	-	5				I/ \ \	weathered bedrook adjacent BHOB)
	_	3 .				H = M	the state of the s
	1	ß		/ \		/ N	unweathered bedrook at 64.0' bosed on distling change
	_	60					•
ا بن د النا		Ž	1				SANDSTONE, moderate reddish brown (IDR 4/0), v. line grained,
	190 —	8	.	5.0	NA	اببتب	quartoze, prominent low angle cross-bedding, haid dry -
lik in .	10	91.01		ن.و	750		
		10	2.5	Managament and American	3 000000000000000000000000000000000000	[بيسنة	Reamed Pylot (4:25") borehole with 12.25" tricone bit from
	-			\setminus /		$\setminus A$	0.0' to 98' bgs. Set 85%" steel casing to 91' has and quuted in place.
	_			X		X	grouted in place.
-	-}			$/ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$		$V \setminus$	Beaus Air (anno cot 98.0 an 7/19/00
			. 1			1.11.	come and exercise said making to this brann (10 P 4/6) sand
	100-		/			11/1	ten-time town 1(10%) and bossion many homen
	-			65	NA	Y:-1	
			44	76	IV A	12	SILTY SANDS NE, moderate reddish brown (DR4/6), sand isu.
:			:•	10		\(\dagger)	The son me quality to 12
	-			·.		X	
	_		·]				The same and a second of the s
			İ	5.7	NR	芝	Y. fini grained, questioned to Fragments, a bundant along all Shale class maras, prominent low angle x-bedding, sine
	[110-			101		- Andrews	(2-10 mm) solution cavities, some titled wil crystale.
							County special controlled sold stilled sit or bire



BOREHOLE LOG

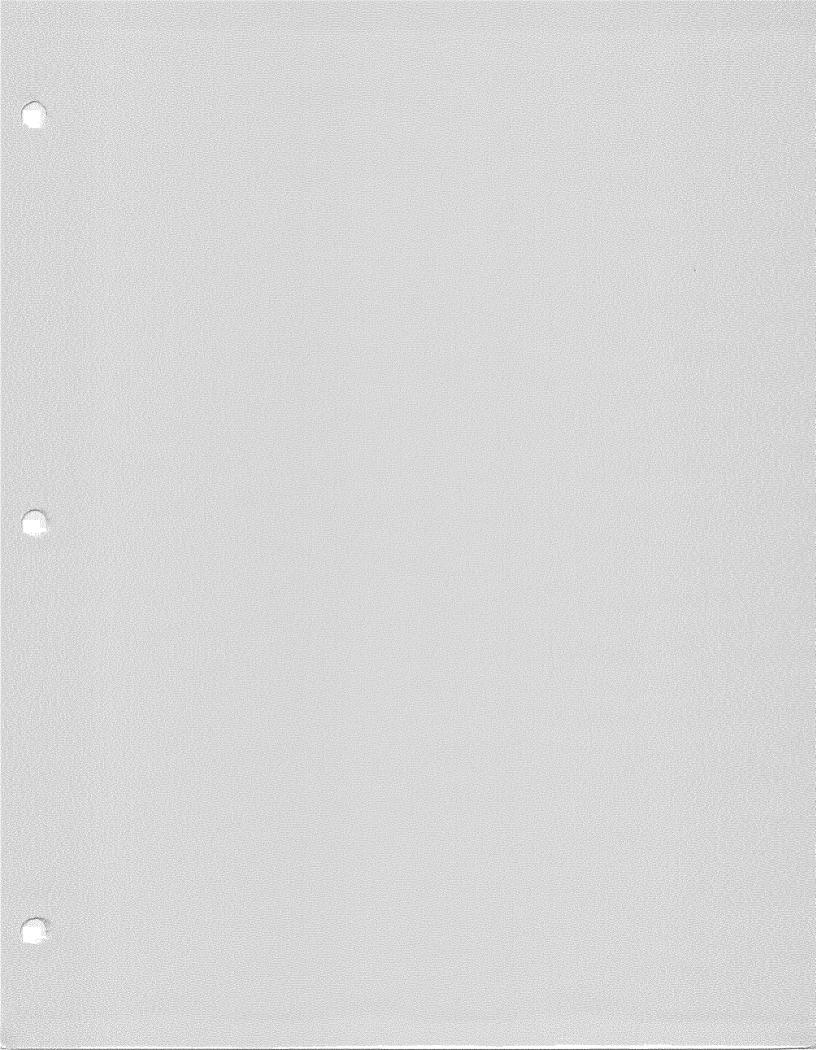
Project Number: 4423-0220

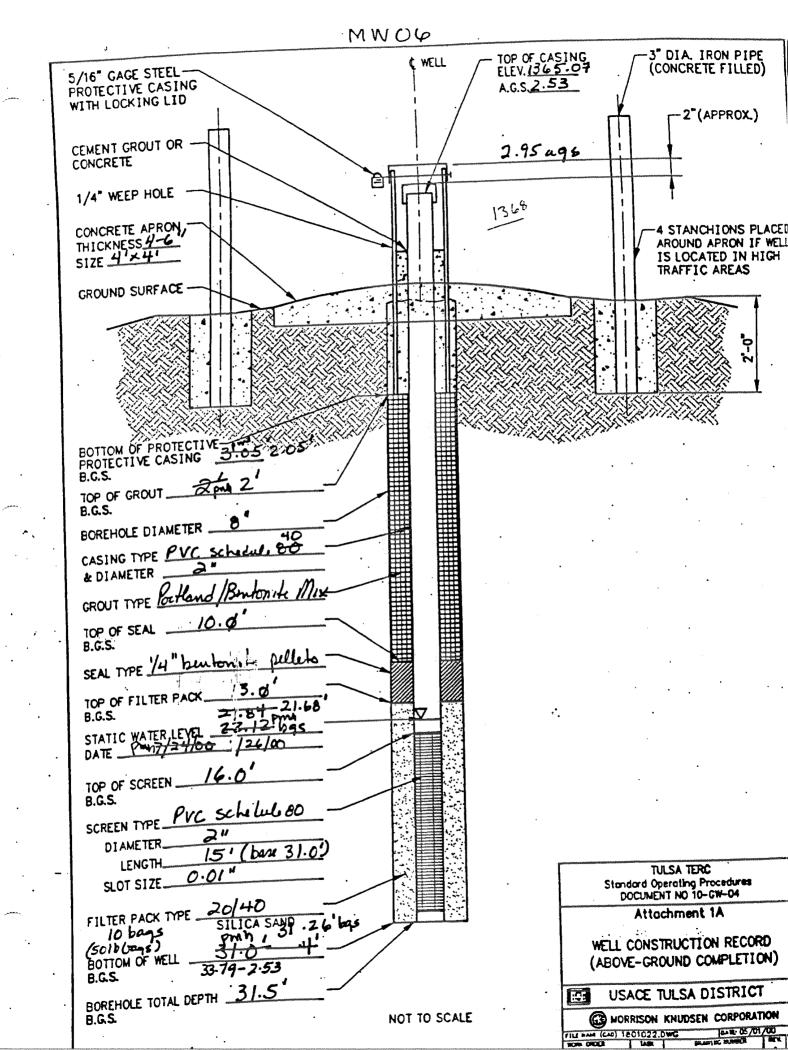
					•		BH-09
Pr	OPE AI	ms.	Nb.	7	ESI 1 372400400		AMS No. 7, Vernon Texas
LEVATION	DEPTH BELÓW SURFACE PI.	INTERVAL .	SAMPLE SAMPLE SOUTH	RECOVERY	PONETRATION TEST RESULTS 67-67-67 (N)	SVMBOLIC LOG	Name, color, grain size, sorting (or gradation), plasticity, weathering, mineralogy, inclusions, angularity, moisture content,
W Agreement		eggine and engine and	\$:\$	5.7	NA		SANDY SHALE, pate reddish brown (10 R 5/4) with pule of the (17 b/2) mithing— Sand is vi fine greened (20-30%) GPProximate SANDSTONE, But reddish brown (10 R 5/4), V. fine, rained, quartoze, law angle X-bedding, moderately comensed.
	 20		φ. φ	6.8	ыA	X	angle x-bedding, moderately comerised.
	130		φ.φ	8.7	ne.		(from 116-138'-loss g = 100 gallons to Fm.)
/,, ,	140		φ.¢	4.9	hv		138.5-140.2' motted pale olive (104 6/2) with a bundant shale closh
	150-	3-	\$.d	3.0	pA		weakly cemented, no no hiceable K-bedding
-	160-		φ.φ	60/10	Mr		159.2-160.7-mothed pali divelogolz) with abundant shale clashed 160.7-164.0'- weakly comercial
•	170			6:3	NA		(from 138-168))000 9 × 160 goelono to Fm) prilere added Instaves lique Polymen at 168 (Flushed out pit prus to co. prilere added Instaves lique Polymen at 168 (Flushed out fies (1-4 mm) 168.0-170.6 well es mental, abusedant solution contrès (1-4 mm) promunent x-bedding (low ong to)



BOREHOLE LOG

١							BH-09				
أا	Propert	ns 1	Jo. 7	E.	SI		Ams No. 7, Vernon, Texas				
			SAMPLE		STANGARD PONETRATION	, .	SOIL DESCRIPTION				
FVATION	DEPTH BELOW BURFACE PI	HTERVAL	報	RECOVERY	TEST PRISULTS 6"-5"-6" (N)	SYMBOLIC	Name, color, grain size, soning (or gradation), plasticity, weathering, mineralogy, inclusions, angularity, moisture coment.				
Ü.]	<u> </u>	 	udimentermoneum au en ubana	170.5-171.5-weekly comented				
	-		0.7	6.0	NA		SILTSTONE, Greenish gray (596/1), shaley in areas, sand content (5%) weakly remember				
				December of the second secon	etalla alaka a	\triangle	SHALE, moderate riddigh brown (10R4/6) nith thin bands of 178-180-soft, wet 180-181.8' very hard, dry 180-181.8' very hard, dry				
	2.6	2.6	61/10	AN		180-180 - sort hard, dry 180-181.8' very hard, dry 181.8-184" - alternating softand hard, do distant dry					
<i>1.,</i> :	-					X	moderate reddish brown (10246) with occassional greenish -				
	190-		2000	뿧			moderate reddish brown (1024/6) with occassional greenish gray (5644/1) s pots, very hard, dry, fractures in areas (possible water bearing).				
	-		72000	5.0	CONSTRUCTION OF THE PROPERTY O						
,	200-		-2000	3.I. 5.0		X					
	-		NR	31 50		X	low battery on PED, lamp will not light				
	210-]	.NR	142.0			7.D. of 210' bas				
	-										
•	-										
	-										
٠	ے محد					1					
	-						• (
]_					. <i>•</i>				
	-	1									
	1230-	+		***************************************		}					





NOT TO SCALE

pain

B.G.S.

B.G.S.

BOREHOLE TOTAL DEPTH 33.0

WELL CONSTRUCTION RECORD (ABOVE-GROUND COMPLETION)

USACE TULSA DISTRICT EE

WORRISON KNUDSEN CORPORATION | 00 / U / W FILL BAM (CA) 1801022.0WG

